

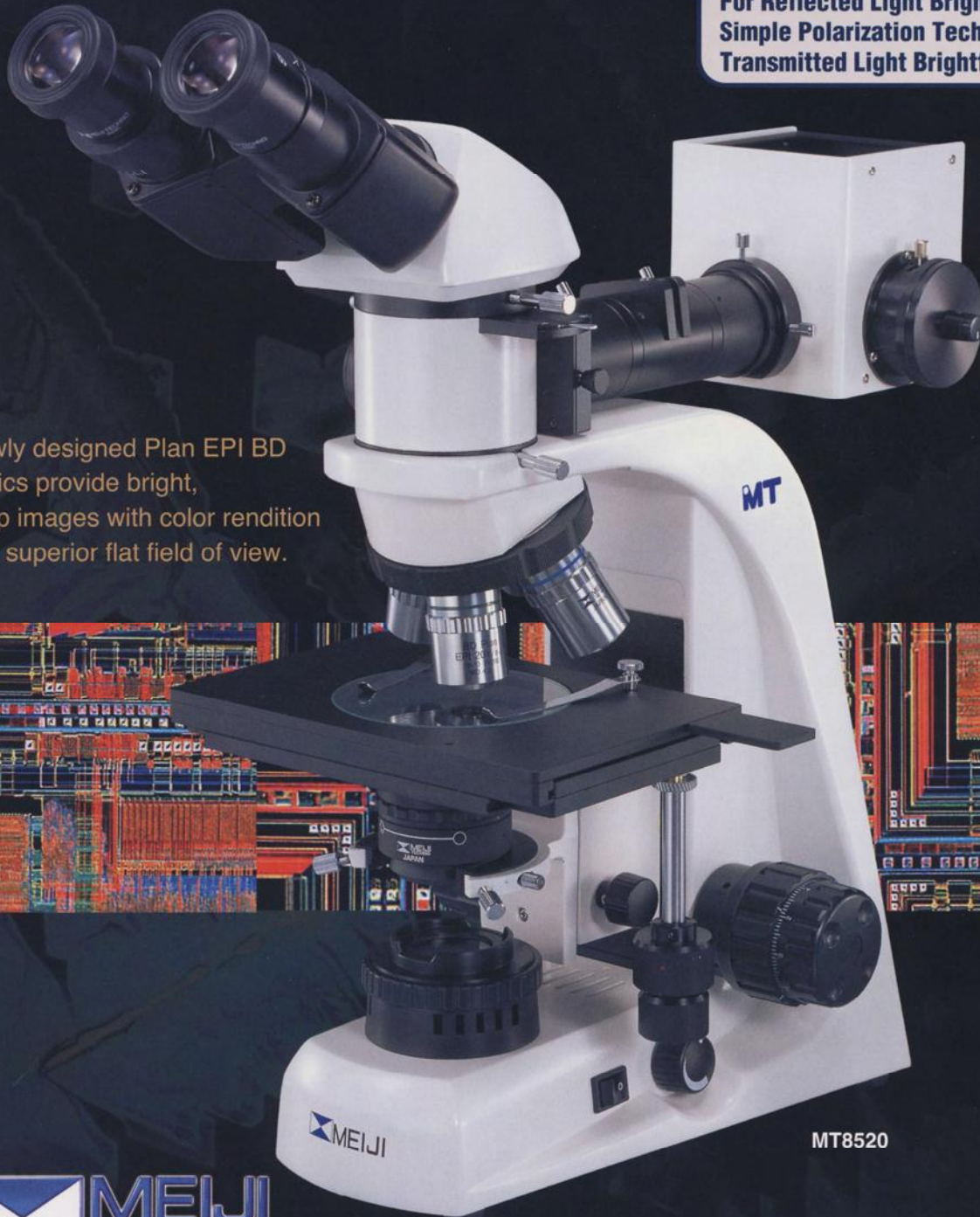
Infinity Corrected Optical System

# MT8500 Series

## METALLURGICAL MICROSCOPES

For Reflected Light Brightfield, Darkfield, Simple Polarization Technique and Transmitted Light Brightfield work

Newly designed Plan EPI BD Optics provide bright, crisp images with color rendition and superior flat field of view.



MEIJI

MT8520

 **MEIJI**  
TECHNO



# MT8500 series

## MT8500 Series METALLURGICAL MICROSCOPES For Reflected Light Brightfield, Darkfield, Simple Polarization Technique and Transmitted Light Brightfield work

A versatile, modular, ergonomic metallurgical microscope system. Newly designed Plan EPI BD optics provides exceptionally bright, crisp images with good color rendition and superior flat field of view.

### Features

#### Eyepieces:

Super Widefield 10X, High Eyepoint Eyepieces, F.N. 22 are standard.

#### Viewing head:

The MT8500 Series Metallurgical microscopes is equipped with either Siedentopf type binocular or Siedentopf type trinocular viewing head Inclined at 30° and rotatable through 360° for comfortable viewing. Optional tilting ergonomic binocular head—Adjustable vertically from 10° ~ 50° is available.

#### Nosepiece:

Large smooth operating Ergonomic Quadruple nosepiece with mounting threads of 26.0mm.

#### Objectives:

Infinity corrected, Plan EPI Brightfield/darkfield Objectives, Plan EPI BD5X/0.10, W.D. 17.0mm, Plan EPI BD10X/0.25, W.D. 7.48mm, Plan EPI BD20X/0.40, W.D. 5.20mm, Plan EPI BD50X/0.75, W.D. 0.38mm.

#### Stage:

Ceramic coated, flat-top stage, 191mm x 126mm with 100mm x 100mm travel. Equipped with precision ball bearing guides and low positioned drop down coaxial controls for X-Y movement.

#### Illuminator:

Vertical illuminator with full Koehler design equipped with 12V 50W Halogen light source, field iris, aperture iris and filter slots. Capable of brightfield, darkfield, or simple reflected polarization technique. Includes blue clear, Green clear, Neutral density (ND 50) filters in mounts. Automatic voltage sensing (100V ~ 240V) power supply and variable rheostat control are supplied in separate case. Transmitted light Koehler illuminator with 6V 30W halogen lamp, automatic voltage sensing (100V ~ 240V) transformer and intensity control are built into the microscope base.

#### Focusing Controls:

Ergonomically low positioned focusing controls allow the operator to work their forearms relaxed on the working surface. Range of travel is 23mm. Rotation of fine focus is 0.2mm per revolution.

#### Size and weight:

Footprint : 263 mm(D) x 176mm(W)

Weight & Overall Dimension :

Binocular head type 477.5 mm(D) x 471 mm(H) x 210 mm(W), 9.4kg

Trinocular head type 477.5 mm(D) x 526 mm(H) x 210 mm(W), 10.1kg



MT8530

## COMPONENTS AND ACCESSORIES FOR MT8500 Series

The items marked with an asterisk (\*) are included in the Models MT8520 & MT8530.



### VIEWING HEAD

- MA815** Binocular head (Siedentopf type), I.P. adjustment 53mm to 75mm graduated diopter on left eyetube (30.0mm I.D. eyetubes). Inclined at 30° (\*Included in Model MT8520)
- MA816** Trinocular head (Siedentopf type), I.P. adjustment 53mm to 75mm graduated diopter on left eyetube (30.0mm I.D. eyetubes). Inclined at 30° (\*Included in Model MT8530).
- MA957** Tilting ergonomic binocular head, adjustable vertically from 10° to 50°. I.P. adjustment 53mm to 75mm, graduated diopter on left eyetube (30.0mm I.D. eyetubes)

### EYEPIECES (30.0mm O.D. Eyetube)

- MA817\*** SWH10X, Widefield high eyepoint eyepiece, Field No. 22, Tube O.D. 30.0mm (MA817 accepts optional 25mm diameter reticle)
- MA818** SWH15X, Widefield high eyepoint eyepiece, Field No. 16.0, Tube O.D. 30.0mm (MA818 accepts optional 19mm diameter reticle)
- MA819** SWH20X, Widefield high eyepoint eyepiece, Field No. 12.0, Tube O.D. 30.0mm (MA819 accepts optional 19mm diameter reticle)
- MA859** SWH10X-F Focusing eyepiece with reticle mount (without reticle), Tube O.D. 30.0mm (MA859 accepts optional 25mm diameter reticle)

### PLAN EPI OBJECTIVES

- MA923\*** Plan Epi Objective BD5X, NA 0.10, W.D. 17.0mm, F.N.22
- MA924\*** Plan Epi Objective BD10X, NA 0.25, W.D. 7.48mm, F.N.22
- MA925\*** Plan Epi Objective BD20X, NA 0.40, W.D. 5.20mm, F.N.22
- MA926\*** Plan Epi Objective BD50X, N.A.0.75, W.D. 0.38mm, F.N.22

### ILLUMINATOR

- MA928\*** Vertical Koehler illuminator, 12V 50W Halogen lamp, with clear blue, clear green, ND50 Neutral density filter and polarizing filters in metal mount.
- MA928/05** Transformer for MA928 in separate case (input 100~240V, 12V 50W)

### FILTERS

- MA475/05\*** Blue clear filter, 20mm diameter in metal mount
- MA476\*** Green clear filter, 20mm diameter in metal mount
- MA774\*** ND50 Neutral density filter, 20mm diameter in metal mount
- MA497\*** Polarizing filter 20mm diameter in metal mount

### STAGE

- MA942\*** Ceramic coated flat-top stage, 191mm x 126mm, 100mm x 100mm, X-Y movement, with right-hand drop-down coaxial controls and 94.5mm diameter clear glass stage plate (Included in Model MT8520 & MT8530)

### EYEPIECE MICROMETERS

(25mm diameter for use with MA817 or MA859 eyepieces)

- MA523** Eyepiece micrometer, Cross-line reticle, 25mm diameter
- MA506** Eyepiece micrometer, 10mm divided into 100 units, 25mm diameter
- MA509** Eyepiece micrometer, 5mm divided into 100 units, 25mm diameter
- MA510** Eyepiece micrometer, 10mm square into 100 parts, 1.0mm square, 25mm diameter
- MA542** Eyepiece micrometer, Cross-line reticle with 0.1mm graduations, 25mm diameter
- MA738** Eyepiece micrometer for grain sizing in steel, 25mm diameter

### EYEPIECE MICROMETERS

(19mm diameter for use with MA818 or MA819 eyepieces)

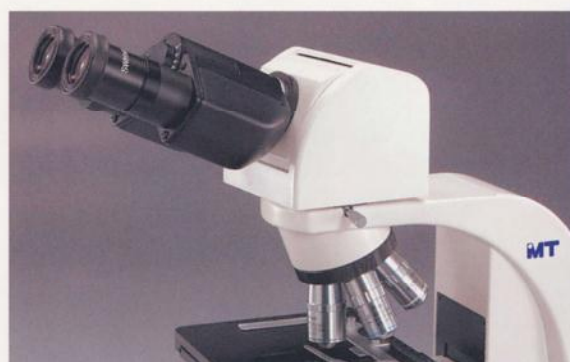
- MA279** Eyepiece micrometer, Cross-line reticle, 19mm diameter
- MA280** Eyepiece micrometer, 10mm divided into 100 units, 19mm diameter
- MA281** Eyepiece micrometer, 5mm divided into 100 units, 19mm diameter
- MA283** Eyepiece micrometer, 10mm square into 100 parts, 1.0mm square, 19mm diameter
- MA539** Eyepiece micrometer, Cross-line reticle with 0.1mm graduations, 19mm diameter

### STAGE MICROMETER

- MA292** Metal stage micrometer, 0.01mm, for reflected light

### MISCELLANEOUS

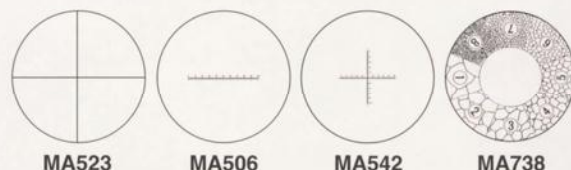
- MA906\*** Eyeshield for MA817 SWH10X Eyepiece (each)
- MA275/05** Spare bulb 12V 50W halogen
- MA326** Spare bulb 6V 30W halogen
- MA327** Spare Fuse 3A
- MA809/10** Removable AC Electric cord with UL plug for 115V Models
- MA809/20** Removable AC Electric cord with European plug for 220V Models
- MA809/30** Removable AC Electric cord with UK plug for 240V Models
- MA701** Dust cover for MT8500 Series microscopes



MA957 ERGONOMIC TILTING BINOCULAR HEAD (SIEDENTOPF TYPE)



PLAN EPI OBJECTIVES

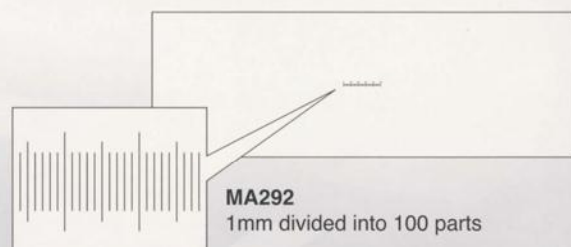


MA523

MA506

MA542

MA738



MA292

1mm divided into 100 parts

## CCD VIDEO & USB 2.0 DIGITAL CAMERAS

**DK3000** 3.0 megapixel, color digital video microscopy camera with high speed USB 2.0 interface, 1/2 format 6.5mm x 4.9mm image sensor with 2048 x 1536 resolution.



DK3000

**CK3100N** CCD Color TV camera. 1/3" CCD, 450 TV lines of resolution, NTSC system with DC12V adapter

**CK3100P** CCD Color TV camera. 1/3" CCD, 450 TV lines of resolution, PAL system with DC12V adapter

**CK3900N** CCD Color TV camera. 1/2" CCD, 450 TV lines of resolution, NTSC system with DC12V adapter

**CK3900P** CCD Color TV camera. 1/2" CCD, 450 TV lines of resolution, PAL system with DC12V adapter



CK3900

**MA958** Photo/Video attachment with sliding 80/20 beam-splitter for attaching video or digital camera to MT Series when MA957 Ergonomic tilting head is used.

## 35mm PHOTOMICROSCOPY

Following three accessories are required for mounting a 35mm SLR camera body

### 1. The appropriate T-2 adapter ring for your SLR camera body:

<b>T2-1</b> Canon	<b>T2-6</b> Olympus
<b>T2-2</b> Minolta	<b>T2-7</b> Contax, Yashika
<b>T2-3</b> Pentax K	<b>T2-8</b> Konica
<b>T2-4</b> Pentax S	<b>T2-9</b> Canon Eos
<b>T2-5</b> Nikon	<b>T2-10</b> Minolta Alpha / Maxim 2000

These adapter rings attach directly to your camera body's lens mount.

### 2. A photo eyepiece, available in the following magnifications:

**MA512** 2.5X magnification  
**MA500** 3.3X magnification (with reticle mount)  
**MA508** 5X magnification

The photo eyepiece performs the same function as a standard 35mm camera lens (i.e. focusing the image at the plane of the film).

### 3. One of two MA150 series camera attachments:

**MA150/50** Straight-tube camera attachment  
**MA150/60** Camera attachment with built-in focusing eyepiece

These attachments are used to mount the camera with T2 adapter ring to the photo tube.



MA150/60 Camera attachment



MA150/50 Camera attachment

## MT8500 Series ORDERING INFORMATION

MODEL	BODY	OBJECTIVES	EYEPIECES	POWER SUPPLY	ILLUMINATOR
MT8520	Binocular (Siedentopf)	Plan Epi BD5X Plan Epi BD10X Plan Epi BD20X Plan Epi BD50X	SWH10X F.N. 22 (O.D. 30mm)	Automatic Voltage Sensing Power Supply	Vertical Koehler 12V 50W Halogen BF/DF and POL & Transmitted 6V30W Halogen Koehler
MT8530	Trinocular (Siedentopf)				



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